

CLAIMS

1. A surface acoustic wave device comprising:
  - a piezoelectric substrate;
  - 5 at least one inter-digital transducers (IDT) provided on said piezoelectric substrate;
  - at least one electrode pad electrically connected to said IDT; and
  - 10 at least one stud bump disposed on said electrode pad such that an LC component of said surface acoustic wave device has a predetermined value.
2. The surface acoustic wave device according to claim 1, wherein said electrode pad is elongated.
3. The surface acoustic wave device according to claim 1, wherein said electrode pad has a first wiring pattern and a second wiring pattern connected to each other at an end thereof and said stud bump is disposed on said electrode pad such that said first and second wiring patterns are electrically short-circuited.
- 20 4. The surface acoustic wave device according to claim 1, wherein said electrode pad has a plurality of wiring patterns, adjacent wiring patterns connected to each other at an end thereof and said stud bump is disposed on said electrode pad such that said adjacent wiring patterns are electrically short-circuited.
5. The surface acoustic wave device according to claim 1, wherein said electrode pad has a first island pattern and a second island pattern and said stud bump is disposed on said electrode pad such that said first and second island patterns are electrically short-circuited.
- 30 6. The surface acoustic wave device according to claim 1, which further comprises a base substrate having a wiring pattern corresponding to said electrode pad, wherein

said stud bump is electrically connected to said wiring pattern of said base substrate.

7. A method of adjusting an LC component of a surface acoustic wave device having at least one stud bump  
5 and at least one electrode pad, said method comprising the steps of:

determining a position at which said stud bump is disposed on said electrode pad such that said LC component of said surface acoustic wave device has a predetermined  
10 value; and

disposing said stud bump at said determined position on said electrode pad.

8. The method according to claim 7, wherein said electrode pad is elongated.

15 9. The method according to claim 7, wherein said electrode pad has a first wiring pattern and a second wiring pattern connected to each other at an end thereof and said first and second wiring patterns are electrically short-circuited by said stud bump disposed at determined  
20 position on said electrode pad.

10. The method according to claim 7, wherein said electrode pad has a plurality of wiring patterns, adjacent wiring patterns being connected to each other at an end thereof and said adjacent wiring patterns are  
25 electrically short-circuited by said stud bump disposed at determined position on said electrode pad.

11. The method according to claim 7, wherein said electrode pad has a first island pattern and a second island pattern and said first and second island patterns  
30 are electrically short-circuited by said stud bump disposed at said determined position on said electrode pad.

12. The method according to claim 7, which further comprises, after said step of disposing said stud bump on said electrode pad, a step of mounting said surface

acoustic wave device onto a base substrate having a wiring pattern corresponding to said electrode pad.